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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------------|
| 10/088,020 | 03/14/2002 | Pentti Olavi Suhonen | PAT134USA | 4930 |
| 24339 | 7590 | 04/01/2004 | EXAMINER | |
| JOEL D. SKINNER, JR. SKINNER AND ASSOCIATES 212 COMMERCIAL ST. HUDSON, WI 54016 | | | RADA, ALEX P | |
| | | ART UNIT | | PAPER NUMBER 3714 8 |
| DATE MAILED: 04/01/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|-----------------|-----------------------|
| | 10/088,020 | SUHONEN, PENTTI OLAVI |
| | Examiner | Art Unit |
| | Alex P. Rada | 3714 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-9 and 11-15 is/are rejected.

7) Claim(s) 10 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: ____ .

DETAILED ACTION

Response to Preliminary Amendment

In response to the preliminary amendment filed March 14, 2002 in which the applicants amend claims 1-15 and claims 1-15 are pending in this office action.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a ball attached to the frame by means of a suspension device, a buffer component attached to the suspension device for stopping the ball in flight, and the devices for recording the direction and length of flight of the ball, characterized in that the buffer component is located at a level that approximately corresponds to the horizontal position of the suspension device and that the recording devices for the direction and/or length of flight of the ball are disposed essentially between the buffer component and the attachment point of the suspension device as recited in claim 1; the devices for recording the direction and/or length of flight of the ball are of a type that records the position of the ball and/or suspension device in a situation in which the ball strokes the buffer component or its vicinity as recited in claim 2; the devices for recording the direction and/or length of the ball's flight are a type of control switch that determines the lateral position of the suspension device of the ball as recited in claim 4; the devices for recording the direction and/or length of flight of the ball are a type of mechanical switch as recited in claim 5; the devices for recording the direction and/or length of flight are based on using light as recited in claim 6; the devices for recording the direction and/or length of flight of the ball are located at the point of attachment of the ball's

suspension device as recited in claim 7; the devices for recording the direction and/or length of flight of the ball and also the device for measuring the direction of the flight of the ball are connected to the movements of the ball's suspension device as recited in claim 8; impulse sensors for recording the movements and/or position of the suspension device as recited in claim 9; the device for recording the direction of flight of the ball comprises sensor devices arranged transversely to the direction of flight of the ball as recited in claim 11; the buffer component is adjustable as recited in claim 13; and the device for measuring the direction of flight of the ball is based on the joystick principle as recited in claim 15 must be shown or the feature(s) canceled from the claim(s). **No new matter should be entered.**

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program

listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

(e) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(f) BRIEF SUMMARY OF THE INVENTION.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (e) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (g) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations

to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

- (j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (k) Sequence Listing: See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The limitation of the recording device for the direction “and/or” length in claims 1-2 and 5-7, which the disclosure has basis for the recording the direction “or” length and no the recording the direction “and” length; impulse sensors for recording the movements and/or position of the suspension device as recited in claim 9; the devices recording the direction of flight of the ball comprises sensor devices arranged transversely to the direction of flight of the ball as recited in claim 11; the joystick principle as recited in claim 15 lacks insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear how the claimed subject matter coincides with the illustration of the figure. The disclosure does not provide an enablement for the type of measuring devices and how they are used to record or calculate the direction and length and/or flight of the ball. Furthermore, the disclosure does not provide enablement for the joystick principle.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the recording devices" in line 4-5. There is insufficient antecedent basis for this limitation in the claim.

In claims 2, 4, and 5, the language of, "the direction and/or length of flight of the ball are of a type" or "are a type of" is vague because the language, "of the type" or "a type of" cannot be determined.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-2 and 14 are rejected as best understood under 35 U.S.C. 102(b) as being anticipated by Murdoch '105.

10. Murdoch discloses an apparatus for golf practice having a frame (figures 1 and 2), a ball (21) attached by means of a suspension (figure 2 item 20), a buffer component (35) attached to the suspension device for stopping the ball in flight, devices for recording the direction and length (figure 3 item 31, figures 4 and 5), the buffer component is located at a level that approximately corresponds to the horizontal position of the suspension device, and the recording devices for the direction and/or length of flight of the ball are disposed essentially between the buffer component and the attachment point of the suspension device (figures 1 and 2) as recited in claim 1; the devices for recording the direction and/or length of flight of the ball are of a type that the position of the ball and/or suspension device in a situation in which the ball strikes the buffer component or its vicinity (figures 3 and 4 and column 3, lines 14-33) as recited in claim 2; the apparatus having a flap-like buffer (34), in which the examiner interprets to be for stopping the backwards and forwards swing of the ball and the suspension above as recited in claim 14.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3, 7-9 and 12 are rejected as best understood under 35 U.S.C. 103(a) as being unpatentable over Murdoch '105 in view of Onozuka '836.

13. Murdoch discloses the claimed invention as discussed above except for a display for showing the position of the ball as recited in claim 3; the recording the direction and/or length of the ball are located at the point of attachment of the ball's suspension device as recited in claim 7; the device for measuring the length of the flight of the ball and also the device for measuring the direction of the flight of the ball are connected to the movement so the ball's suspension device as recited in claim 8; impulse sensors for recording the movements and/or position of the suspension device as recited in claim 9; the display having a field of indicator lights or a display screen of a computer, which change in position of the ball derived from the results of the recording devices seen on the display as recited in claim 12.

Onozuka teaches a display for showing the position of the ball on a display screen from the results of the recording devices and the recording of the direction and/or length of the ball are located at the point of attachment and movement (within bed plate 18) of the ball's suspension device. By having a display screen for displaying the position of the results of the recording devices, one of ordinary skill in the art would provide an accurate depiction of a ball on a simulated hole on a golf course. Therefore, it would have been obvious to one of ordinary skill

in the art at the time of the applicant's invention was made to modify Murdoch to include a display for showing the position of the ball and the display having a field of indicator lights or a display screen of a computer, which change in position of the ball derived from the results of the recording devices seen on the display, and the recording of the direction and/or length of the ball are located at the point of attachment and movement of the ball's suspension device as taught by Onozuka. To do so would provide an accurate depiction of a ball on a simulated hole on a golf course.

14. Claims 4-5 and 13 are rejected as best understood under 35 U.S.C. 103(a) as being unpatentable over Murdoch '105 in view of Murat '185.

15. Murdoch discloses the claimed invention as discussed above except for the devices for recording the direction and/or length of the ball's flight are a type of control switch that determines the lateral position of the suspension device of the ball as recited in claim 4; the devices for recording the direction and/or length of the ball's flight are a type of mechanical switch as recited in claim 5; the buffer component is adjustable as recited in claim 13.

Murat teaches the device for determining the lateral position of the suspension is a control switch and a mechanical switch (figures 9 and 12) and an adjustable buffer, in which the examiner interprets to be solenoid winding assemblies 58 and 70 of figure 3. By having a control switch and/or mechanical switch for determining lateral position, one of ordinary skill in the art would provide golfers with an indication of an error in a golf swing. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention was made to modify Murdoch to include a type of control switch that determines the lateral position of the suspension device of the ball and the devices for recording the direction and/or length of

the ball's flight are a type of mechanical switch and an adjustable buffer as taught by Murat. To do so would provide golfers with an indication of an error in a golf swing.

16. Claims 6 and 11 are rejected as best understood under 35 U.S.C. 103(a) as being unpatentable over Murdoch '105 in view of Pao '526.

17. Murdoch discloses the claimed invention as discussed above except for the devices for recording of the direction and/or length of flight are based on using light as recited in claim 6; the device for recording the direction of flight of the ball having sensor devices arranged transversely to the direction of flight of the ball as recited claim 11.

Pao teaches the recording of direction and/or length of flight are based on using light (optical sensors) and sensor devices arranged transversely to the direction of flight of the ball (figure 1). By having recording the direction and/or length of flight by light, one of ordinary skill in the art would provide golfers with an indication of an error in a golf swing. Therefore it would have been obvious to one of ordinary skill in the art at the time of the application was made to modify Murdoch to include light as part of the recording of the direction and/or length of flight and sensor devices arranged transversely to the direction of flight of the ball as taught Pao. To do so would provide golfers with an indication of an error in a golf swing.

18. Claim 15 is rejected as best understood under 35 U.S.C. 103(a) as being unpatentable over Murdoch '105 in view of Lew '432.

19. Murdoch discloses the claimed invention as discussed above except for the device for measuring the direction of flight of the ball is based on the joystick principle.

Lew teaches the measuring of the direction of flight of the ball is based on the joystick principle. By having measuring the direction of flight of the ball based on the joystick principle,

one of ordinary skill in the art would provide an accurate feedback as to the extent of the defects in a golfers stroke. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the application was made to modify Murdoch to include the measuring of the direction of flight of the ball is base on the joystick principle as taught by Lew. To so would provide an accurate feedback as to the extent of the defects in a golfers stroke.

Allowable Subject Matter

20. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

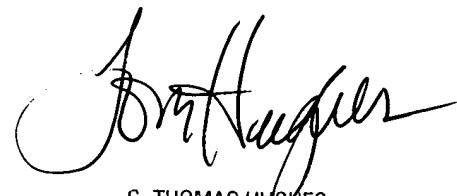
Bouton '639, Tonner '121, Branz '296, Simjian '338, Honnef '271, Russell '405, Smith '616, and Page '035 all disclose different types of golf training devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex P. Rada whose telephone number is 703-308-7135. The examiner can normally be reached on Monday - Friday, 08:00-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Apr



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